

Preface

The Foundation Manual is intended to provide the field engineer with information that may be of some assistance in solving foundation problems and in making engineering decisions.

Although the field engineer is required to make engineering decisions throughout the life of a construction project, none is probably more important than the engineer's decision regarding the suitability or unsuitability of the foundation material supporting a spread footing foundation. The engineer must decide if the foundation material encountered at the planned bottom of footing elevation is, in fact, representative of the material shown on the Log of Test Borings sheet and therefore suitable for the imposed loads. If not representative, the engineer must decide what action to take.

This is not to minimize the importance of pile supported foundations, which have their own unique problems that require decisions based on sound engineering judgement. What action does the engineer take when pile bearing capacity is not obtained at specified tip or reaches "refusal" ten feet above tip elevation?

All types of foundations are discussed in the manual along with related problems and possible solutions. There is no one solution that will always solve a particular problem. Each situation must be reviewed and a decision made based on the available data and one's own experience.

There is no substitute for utilizing sound engineering judgement in solving engineering problems. If all problems are solved in this manner, then the engineer can be confident that a good solution was used to solve the problem.